



0000200428

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

Arizona Corporation Commission

DOCKETED

DEC 17 2019

DOCKETED BY

aa

IN THE MATTER OF THE APPLICATION OF
ARIZONA PUBLIC SERVICE COMPANY FOR
APPROVAL OF A REVISED APS PARTIAL
REQUIREMENTS RATE SCHEDULE EPR-2.

DOCKET NO. E-01345A-16-0272

DECISION NO. 77512

OPINION AND ORDER

DATES OF HEARING:

January 17, 2019 (Procedural Conference); February 25, 2019 (Procedural Conference); June 4, 2019 (Procedural Conference); August 2, 2019 (Procedural Conference); August 20, 2019 (Oral Argument); August 21, 2019 (Pre-Hearing Conference); August 26, 2019 (Public Comment); August 27-29, 2019 (Evidentiary Hearing); October 10, 2019 (Oral Argument).

PLACE OF HEARING:

Phoenix, Arizona

ADMINISTRATIVE LAW JUDGE:

Scott M. Hesla

APPEARANCES:

Ms. Melissa M. Krueger and Mr. Thomas L. Mumaw, PINNACLE WEST CAPITAL CORPORATION, on behalf of Arizona Public Service Company;

Mr. Raymond Heyman, SNELL & WILMER, L.L.P., on behalf of Arizona Public Service Company;

Mr. Michael W. Patten, SNELL & WILMER, L.L.P., on behalf of Tucson Electric Power Company and UNS Electric, Inc;

Mr. Bradley S. Carroll, on behalf of Tucson Electric Power Company and UNS Electric, Inc.;

Mr. Thomas A. Loquvam, THE LOQUVAM LAW FIRM, on behalf of Arizona Energy Policy Group, Inc.;

Mr. Stanley B. Lutz, LEWIS ROCA ROTHGERBER CHRISTIE, on behalf of Arizona Energy Policy Group, Inc.

Mr. Court S. Rich, ROSE LAW GROUP, P.C., on behalf of 1.21 GW LLC;

Mr. Peter M. Morgan, on behalf of Sierra Club Environmental Law Program;

Ms. Jennifer A. Cranston, GALLAGHER & KENNEDY, P.A., on behalf of Grand Canyon State Electric Cooperative Association, Inc.;

Mr. Adam L. Stafford, on behalf of Western Resource Advocates; and

Ms. Maureen Scott, Mr. Robert W. Geake, and Ms. Robyn Poole, Arizona Corporation Commission Legal Division, on behalf of the Utilities Division

BY THE COMMISSION:

On August 5, 2016, Arizona Public Service Company (“APS” or “Company”) filed an application with the Arizona Corporation Commission (“Commission”) requesting to, among other things, add language to its existing Partial Requirements Rate Schedule EPR-2 (“EPR-2”) to establish a presumptive two-year term for purchase power agreements between APS and qualifying facilities (“QFs”)¹ with a nameplate capacity of over 100 kW. Tucson Electric Power Company (“TEP”) and UNS Electric, Inc. (“UNSE”) filed similar applications in other dockets,² and the three dockets were joined for the purpose of holding a joint evidentiary hearing. The issue germane to all three dockets is whether and to what extent the Commission should mandate a standard contract term for fixed price contracts with QFs under the Public Utility Regulatory Policies Act of 1978 (“PURPA”).

Intervention in all three dockets was granted to Sierra Club, Arizona Energy Policy Group, Inc. (“AEPG”), Grand Canyon State Electric Cooperative Association (“GCSECA”), 1.21 GW, LLC (“1.21 GW”), and Western Resource Advocates (“WRA”).

On August 27-29, 2019, a full public joint evidentiary hearing was held before a duly authorized Administrative Law Judge of the Commission. At that hearing, APS, TEP, UNSE, Sierra Club, AEPG, GCSECA, 1.21 GW, WRA, and Staff appeared through counsel. APS provided the testimony of Mr. Bradley J. Albert and Mr. Leland R. Snook; TEP and UNSE provided the testimony of Mr. Michael E.

¹ PURPA defines a QF as a small power production facility or cogeneration facility that has a right to be served by, and sell to, its host electric utility at the utility’s avoided cost rate. A small power production facility is a generating facility of 80 MW or less whose primary energy source is renewable (solar, wind, hydro), biomass, waste, or geothermal resources. A cogeneration facility is a generating facility that sequentially produces electricity and another form of useful thermal energy (such as heat or steam) in a way that is more efficient than the separate production of both forms of energy (e.g. using steam to provide hot water for domestic heating purposes). 18 C.F.R. §§ 292.101, *et seq.*

² See Docket No. E-01933A-17-0360 and Docket No. E-04204A-18-0087, respectively.

1 Sheehan; GCSECA provided the testimony of Mr. Kurt Strunk; Sierra Club provided the testimony of
 2 Mr. Neal Townsend; 1.21 GW provided the testimony of Mr. Ben F. Jacoby and Mr. Jason Ellsworth;
 3 and Staff provided the testimony of Mr. Patrick LaMere. At the conclusion of the hearing, the parties
 4 were directed to file initial closing briefs by October 9, 2019, and reply briefs by October 16, 2019.

5 DISCUSSION

6 **I. PURPA**

7 PURPA was enacted by Congress in 1978 for the primary purpose “to lessen the country’s
 8 dependence on foreign oil and to encourage the development of renewable energy technologies as
 9 alternatives to fossil fuel.”³ PURPA achieves its purpose by requiring electric utilities to purchase
 10 energy and capacity from QFs at the utility’s avoided cost.⁴ This mandatory purchase obligation is
 11 commonly referred to as the “must-take” or “must-purchase” provision.⁵

12 The Federal Energy Regulatory Commission (“FERC”) develops rules to implement PURPA.
 13 The rate at which the utility must purchase the power from a QF is at the utility’s avoided cost.⁶ The
 14 utility’s avoided cost is the “incremental cost to an electric utility of electric energy or capacity or both
 15 which, but for the purchase from the [QF], such utility would generate itself or purchase from another
 16 source.”⁷ The avoided cost rate must be just and reasonable, in the public interest, and
 17 nondiscriminatory against QFs.⁸ The QF developer has the option to set a fixed QF contract rate at
 18 either the time of the QF contract (the “legally enforceable obligation” or “LEO”) or at the time of
 19 delivery.⁹ Under current PURPA regulations, the avoided cost rate cannot be adjusted during the term
 20 of the contract.¹⁰

21 In 2005, Congress enacted the Energy Policy Act which amended PURPA to account for the
 22 development of competitive markets. Section 210(m) of PURPA provides utilities with the ability to
 23 petition FERC for relief from the “must-take” obligation. FERC will grant such relief provided that

24 ³ *FERC v. Mississippi*, 456 U.S. 742, 745-46 (1982).

25 ⁴ 18 C.F.R. § 292.303.

26 ⁵ Exh. APS-3 at 3.

27 ⁶ 18 C.F.R. § 292.303.

28 ⁷ 18 C.F.R. § 292.101(b)(6).

⁸ 18 C.F.R. § 292.304(a)(1).

⁹ 18 C.F.R. § 292.304(d).

¹⁰ However, FERC recently proposed changes to its rules to allow adjustments to the avoided cost rates during the term of the QF contract. *See* Discussion Section II, *infra*.

1 the QF has nondiscriminatory access to competitive wholesale energy markets within the utility's
2 service territory. In Order 688, FERC determined which of the existing wholesale markets, Regional
3 Transmission Organizations ("RTOs"), and Independent System Operators ("ISOs") met the
4 requirements for relief under Section 210(m).¹¹

5 Sections 201 and 210 of PURPA require state regulatory agencies to implement the rules
6 promulgated by FERC. Specifically, PURPA provides state regulatory agencies with the "primary role
7 in calculating avoided costs and in overseeing the contractual relationship between QFs and utilities."¹²
8 State regulatory agencies may comply with PURPA's requirements "by issuing regulations, by
9 resolving disputes through orders on a case-by-case basis, or by taking any other action reasonably
10 designed to give effect to [PURPA's requirements]."¹³

11 The Commission considered and decided how to implement the requirements of PURPA in
12 Decision Nos. 52345 (July 27, 1981) and 56271 (December 18, 1988) (collectively, the "PURPA
13 Policy"). The purpose of the PURPA Policy was to (1) "encourage development of cogeneration and
14 small power production;" (2) "provide a flexible guideline for the development of cogeneration and
15 small power production resources where such development is cost beneficial and in the best interest of
16 ratepayers, the electric utility company, and the [QF];" and (3) "reduce the administrative and
17 bureaucratic barriers to the advancement of cogeneration and small power production, not to impose
18 frustrating delays and procedures."¹⁴

19 Notably, neither PURPA nor the PURPA Policy specify a minimum (or a maximum) QF
20 contract term length.¹⁵ FERC has recently clarified that legally enforceable contract terms under
21 PURPA must be long enough to "allow QFs reasonable opportunities to attract capital from potential
22 investors."¹⁶ Many state regulatory agencies have initiated proceedings to review their PURPA
23 implementation policies, including establishing or modifying existing minimum contract term length
24 for fixed price contracts between utilities and QFs.

25
26 ¹¹ See 18 C.F.R. § 292.309(a)(1), (2), and (3).

27 ¹² *Allco Renewable Energy Ltd. v. Massachusetts Elec. Co.*, 208 F.Supp.3d 390, 393 (D. Mass. 2016).

28 ¹³ *FERC v. Mississippi*, 456 U.S. 742, 751 (1982)

¹⁴ Decision No. 52345, Policy Statement at 1.

¹⁵ *Id.*

¹⁶ *Windham Solar LLC & Allco Fin. Ltd.*, 157 FERC ¶61,134 (2016) at ¶8.

II. FERC's Proposed Modifications to PURPA

On October 4, 2019, FERC published a Notice of Proposed Rulemaking ("NOPR") proposing to revise its PURPA regulations "in light of changes in the energy industry since 1978."¹⁷ The purpose of the proposed revisions are to "grant state regulatory authorities that oversee regulated electric utilities and nonregulated electric utilities...the flexibility in key respects to incorporate competitive market pricing in the rates paid by electric utilities to [QFs]."¹⁸ Specifically, the NOPR would modify the existing rules to allow, among other things, state regulatory authorities: 1) to incorporate market pricing into avoided cost energy rates; and 2) require energy rates (but not capacity rates) to vary during the life of QF contracts.¹⁹ In addition, the NOPR requires state regulatory authorities to establish objective and reasonable standards for QFs to obtain legally enforceable obligations for the purchase of their power.²⁰

III. The Investment Tax Credit

On May 30, 2019, at a scheduled Staff Open Meeting, the Commission voted in favor of directing the Hearing Division to develop an appropriate procedural schedule to process this matter prior to the end of calendar year 2019. At that time, the Commission expressed concern that certain QF developers in Arizona may partially lose the benefit of certain federal tax credits if this matter was not decided before the end of 2019.

Section 48 of the Internal Revenue Code ("IRC") provides a federal investment tax credit ("ITC") for qualifying energy property placed in service during the relevant taxable year. The tax credit was enacted by the Energy Tax Act of 1978, which created a temporary 10 percent tax credit for business energy property and equipment utilizing qualifying energy resources other than oil or natural gas. Congress has enacted additional legislation over the years resulting in substantial modifications to the ITC.²¹ Currently, eligible residential and commercial types of energy property can earn: a 30

¹⁷ Qualifying Facility Rates and Requirements, Implementation Issues under the Public Utility Regulatory Policies Act of 1978, 168 FERC ¶61, 184 (September 19, 2019) ("FERC NOPR"), at ¶1. *See also* FERC Docket Nos. RM19-15-000 and AD16-16-000.

¹⁸ FERC NOPR at ¶4.

¹⁹ *Id.* at ¶¶5, 7.

²⁰ *Id.* at ¶7.

²¹ Subsequent legislative modifications to the ITC include: the Tax Reform Act of 1986; the Miscellaneous Revenue Act of 1988; the Omnibus Budget Reconciliation Act of 1989; the Omnibus Budget Reconciliation Act of 1990; the Tax Extension Act of 1991; the Energy Policy Act of 1992; the Energy Policy Act of 2005; the Tax Relief and Health Care Act

1 percent tax credit if the project begins construction prior to January 1, 2020; a 26 percent tax credit if
2 the project begins construction prior to January 1, 2021; and a 22 percent tax credit if the project begins
3 construction prior to January 1, 2022. The tax credit continues a 4 percent step down each successive
4 taxable year until the tax credit amount is equal to 10 percent.

5 On July 25, 2019, Congress introduced the Renewable Energy Extension Act of 2019, which
6 would amend Section 48 of the IRC to provide a 5-year extension of the 30 percent tax credit through
7 the end of taxable year 2024. However, to date, this legislation remains pending and no action has thus
8 far been taken by Congress.

9 **IV. Staff's Recommendation to Suspend this Proceeding**

10 On October 4, 2019, Staff filed a Request for a Procedural Conference requesting that a
11 procedural conference be scheduled to discuss, among other things, whether this proceeding should be
12 suspended in order to allow time for FERC to finalize its proposed revisions to PURPA. According to
13 Staff, the NOPR, if adopted as proposed, would materially alter Staff's recommendations in this
14 proceeding. Staff indicates that a delay of six months should allow FERC adequate time to finalize its
15 proposed revisions set forth in the NOPR. APS, TEP, UNSE, AEPG, and GCSECA support Staff's
16 recommendation to suspend this proceeding as being in the public interest. 1.21 GW, Sierra Club, and
17 WRA oppose Staff's recommendation and urge the Commission to move forward with a decision in
18 this proceeding.

19 APS notes that the Commission's role is to implement PURPA. In this regard, APS argues that
20 there is wisdom in waiting to see how PURPA might change, rather than rush ahead with rules that
21 could contravene those changes. APS maintains that in the interim, the Commission's current PURPA
22 Policy would remain in effect, and QFs would be able to continue their communication and negotiations
23 with electric utilities in Arizona.

24 AEPG argues that any decision reached in this docket will be overtaken by federal regulatory
25 changes. According to AEPG, if a decision is issued in this docket, the Commission will need to revisit
26 these issues in a relatively short timeframe. AEPG further argues that if the Commission orders utilities
27

28 of 2006; the Emergency Economic Stabilization Act of 2008; the American Recovery and Reinvestment Act of 2009; the
Consolidated Appropriations Act of 2016; and the Bipartisan Budget Act of 2018. Exh. S-1a at 10.

1 to enter into long-term contracts with QFs at a fixed avoided cost now, and FERC revises its rules to
2 allow energy rates to vary, ratepayers will be denied the benefit that change would bring to Arizona.
3 AEPG asserts that no harm will result from a short suspension of this proceeding to allow FERC to
4 issue its final rule.

5 1.21 GW argues that the Commission should not grant a suspension of this proceeding for the
6 following four reasons: 1) the fact that FERC was working towards issuance of a NOPR has been
7 known to the Commission from the outset of this proceeding, and the Commission made its intention
8 known to move forward with this understanding; 2) it is impossible to anticipate what, if any, final rule
9 will result from the NOPR, or how that final rule will impact Arizona; 3) the NOPR is only a draft rule
10 and as such, it carries no weight; and 4) the logic of suspending this proceeding due to a rulemaking
11 would call for placing virtually every item at the Commission on hold while the Commission resolves
12 its own docket dealing with the Commission's energy rules. 1.21 GW maintains that if the NOPR
13 becomes a final rule, the Commission can revisit the issue at that time for future PURPA
14 implementation.

15 Sierra Club argues that the Commission should not suspend this proceeding because it could be
16 years before FERC finalizes its proposed rulemaking. According to Sierra Club, the most recently
17 completed FERC rulemaking took over three years between the NOPR and the Final Rule, with the
18 effective date coming more than four years after the NOPR was issued.²² Further, Sierra Club notes
19 that the final rule may diverge significantly from the proposed rule. Moreover, Sierra Club contends
20 that any changes by FERC to PURPA cannot change Congressional intent that PURPA be used to
21 promote QF development.

22 Resolution

23 There is merit to Staff's recommendation to temporarily delay the outcome of this proceeding
24 pending the finalization of FERC's proposed changes to PURPA. However, PURPA and FERC's rules
25 remain in effect, and the Commission maintains an obligation to implement PURPA as it exists today.
26 Moreover, although Staff and APS suggest that the rulemaking process might be finalized within six

27 ²² Data Collection for Analytics and Surveillance and Market-Based Rate Purposes, 84 Fed. Reg. 36,390, 36,392 (July 26,
28 2019) (noting that the NOPR was issued on July 21, 2016, the Final Rule was issued July 26, 2019, and the Final Rule will become effective October 1, 2020).

1 months, there is no guarantee that the rulemaking process will be completed within such an immediate
2 timeframe. Indeed, it is not inconceivable that FERC's rulemaking process will endure for multiple
3 years. Accordingly, we decline to adopt Staff's recommendation to suspend the outcome of this
4 proceeding pending the finalization of FERC's rulemaking process.

5 **V. Application**

6 In its application, APS requests an order from the Commission approving revisions to its Rate
7 Schedule EPR-2 (applicable to QFs), to include: 1) routine updates to the generation purchase rates
8 based on avoided costs; and 2) a presumptive limitation on QF contracts greater than 100 kW to terms
9 not to exceed two years without express Commission approval.²³ According to APS, these changes are
10 necessary to better align QF rates with APS's forecast of avoided costs in evolving market conditions,
11 and to ensure that customer interests are protected.²⁴

12 **VI. Positions of the Parties**

13 APS

14 According to APS, the original reasons for enacting PURPA have changed since 1978. APS
15 maintains that PURPA initially presumed that the QF would be a utility customer that would utilize
16 cogeneration or renewable systems to self-generate power, with potential excess energy sold back to
17 the utility. APS claims that presumption is contradicted by today's realities, where QFs are large
18 merchant generation facilities, backed by sophisticated developers, built solely and specifically to sell
19 wholesale power for profit. APS claims that 1.21 GW is an example of such a developer, and notes
20 that 1.21 GW has provided plans to develop 960 MW of QF generation in APS's service territory by
21 the end of 2022.²⁵

22 APS asserts that shorter term QF contracts are in the public interest because they will allow the
23 corresponding avoided cost rate to be more frequently reviewed to ensure accuracy and relevancy.
24 According to APS, avoided cost calculations are simply best effort estimates or forecasts made at a
25 specific point in time which, as time goes by, will not ultimately reflect the actual cost avoided.²⁶ APS

26 ²³ APS notes that no party opposes its request to reset the rates paid to QFs under 100 kW. As a result, APS requests that
27 this revision to its tariff be approved.

28 ²⁴ Tr. Vol. I at 286:5-7.

²⁵ Exh. APS-2 at Exhibit A; Exh. APS-9.

²⁶ Tr. Vol. I at 291:5-25.

1 contends that decades-long contracts lock customers into paying rates that no longer represent the
2 actual avoided costs. As a result, APS maintains that short-term contracts will protect customers from
3 overpaying for QF power.

4 APS asserts that its avoided costs have been and will continue to decline, especially during the
5 hours in which solar resources produce energy. According to APS, aggressive clean energy standards
6 in California and other states require significant additions of renewable resources which will increase
7 the frequency of negative prices in the wholesale market. APS witness Mr. Albert testified that APS
8 reasonably anticipates that a large influx of solar resources in the southwest could so significantly
9 depress market prices that at times the avoided cost rate could be negative.²⁷ Testifying further, Mr.
10 Albert indicated that the downward trend in the avoided cost rate is expected to continue, and the
11 corresponding declines in avoided costs are not adequately reflected in today's current avoided cost
12 forecast.²⁸ APS contends that limiting the term of commitments of "must-take" QF energy to two years
13 is in the public interest because it will allow APS customers to benefit from negatively priced energy
14 in the southwest region.

15 APS contends that shorter term QF contracts will benefit customers by allowing APS the
16 operational flexibility to fully participate in the California Independent System Operator ("CAISO")
17 Western Energy Imbalance Market ("EIM").²⁹ In order to take advantage of negatively priced energy
18 in the EIM, APS notes that it must curtail its existing resources.³⁰ Mr. Albert testified that APS
19 customers have received over \$100 million of gross benefits from participation in the EIM.³¹
20 According to APS, QFs and their associated energy cannot be dispatched or curtailed, which creates
21 significant operational limitations that may adversely impact the effectiveness, efficiency, and
22 reliability of system operations. Mr. Albert testified that increasing the amount of inflexible resources
23 (such as QFs) will reduce the benefits of EIM participation to APS and its customers, and could cause
24

25 ²⁷ Exh. APS-1 at 8.

26 ²⁸ Exh. APS-1 at 2.

27 ²⁹ The EIM is designed to facilitate the dispatch of generating resources across the southwest region.

28 ³⁰ Curtailment is the practice of reducing the output from an electricity producer below the level it could otherwise generate given the available resources.

³¹ Tr. Vol. I at 46:11-21. This figure is calculated from the date APS joined the EIM in 2016, through the second quarter of 2018. *Id.*

1 APS to sell power into the EIM in order to maintain reliability at times when it would otherwise be
2 paid to take power from the market.³²

3 APS further contends that short-term contracts are in the public interest because they would
4 allow APS to more effectively respond to ongoing changes in both the state and federal regulatory
5 paradigm. For example, APS maintains that longer term contracts would not allow APS to adapt to the
6 potential changes resulting from the Commission's pending retail electric competition docket.³³ APS
7 claims that if incumbent electric public service utilities are divested of their generation assets, that
8 result would conflict with (or even moot) PURPA obligations to purchase QF power. APS witness Mr.
9 Albert testified that:

10 The introduction of retail competition in Arizona could significantly alter the
11 amount of customer load that the utility is responsible for serving. This could
12 potentially result in QF contractual commitments that are surplus to what the
13 utility would need to satisfy remaining load obligations, and would therefore
14 become stranded costs which APS customers would be required to pay. The
15 potential for policy changes such as deregulation introduce a great degree of
16 uncertainty to the calculation of avoided costs, and another reason to limit the
17 length of future QF contracts so that customer risk can be minimized.³⁴

18 APS asserts that burdening electric utility customers with unnecessary stranded costs resulting from
19 long-term QF contracts is a detrimental consequence that can be avoided or mitigated by shortening
20 the contract term.

21 Although APS acknowledges FERC's position that minimum contract lengths must be "long
22 enough to allow QFs reasonable opportunities to attract capital from potential investors,"³⁵ APS asserts
23 that a shorter-term contract length is not inconsistent with this position. Rather, APS cites to the
24 testimony of 1.21 GW witness Mr. Jacoby who testified that a QF project could be financed with terms

25 ³² Tr. Vol I at 46:9-23. When an over-supply situation occurs and there are non-curtable resources on the system, a utility
26 must maintain balance on the system by either: 1) selling the excess power on the wholesale market (for whatever price the
27 market will bear); or 2) curtailing other sources of generation (to the extent that there are any generation sources that can
be curtailed. Exh. APS-1 at 11.

³³ Docket No. RE-00000A-18-0405.

³⁴ Exh. APS-2 at 9.

³⁵ *Windham Solar LLC & Allco Fin. Ltd.*, 157 FERC ¶61,134 (2016) at ¶8.

1 of two-years depending on price.³⁶ Moreover, Mr. Snook testified that past purchase power agreements
2 between APS and QFs have typically had one-year terms, and were subject to renewal under successive
3 one-year terms.³⁷ APS acknowledges that while locking in a fixed revenue stream at an above-market
4 contract makes it easier to obtain financing, APS asserts that requiring it to purchase power that is not
5 needed or over-priced over a long period of time is unreasonable and not in the public interest.

6 APS argues that the arguments raised by 1.21 GW, Sierra Club, and WRA (collectively, “QF
7 Intervenors”) are misplaced. Although the QF Intervenors point to customer benefits associated with
8 QF contracts, APS asserts that there is no evidence to support a claim that any such benefits are
9 uniquely tied to long-term QF contracts. Further, APS asserts that there is likewise no evidence that
10 any such customer benefits would disappear under QF contracts of less than 15-years.

11 In response to the QF Intervenors’ position that curtailment and renewable energy credits
12 (“RECs”) ownership provisions can be negotiated in QF contracts, APS submits that PURPA does not
13 require the QF to agree to those provisions. To that end, APS asserts that there is no evidence in the
14 record that any QF seller would be willing to agree to any such terms, and there is no reason to believe
15 that a QF seller would voluntarily agree to such terms without increasing the fixed contract price.

16 APS contends that the evidence in this proceeding fully supports APS’s request for a
17 presumptive limitation on any QF contract greater than 100 kW to a term not exceeding two years.
18 APS asserts that its request fairly protects APS customers from the negative consequences of long-term
19 QF contracts. However, in the event the Commission determines that it prefers Staff’s
20 recommendation, APS submits that it could support that proposal as a workable compromise for
21 managing risks to customers.³⁸

22 AEPG

23 AEPG is a non-profit 501(c)(6) corporation formed to provide perspective to state and national
24 regulators regarding Arizona energy challenges and opportunities. AEPG’s members include investor-
25 owned electric power utilities and electric cooperatives in Arizona. AEPG proposes that the

26 ³⁶ Tr. Vol. II at 431:18-432:11. Mr. Jacoby further testified that he was aware of a QF obtaining financing in the amount
27 of \$97.4 million based on a purchase power agreement with an eight-year remaining term. Tr. Vol. II at 407:21-410:23;
Exh. APS-8.

28 ³⁷ Exh. APS-4 at Exhibit A.

³⁸ Tr. Vol. I at 50:22-25; Tr. Vol. II at 343:8-344:1-2.

Commission's existing PURPA Policy remain unchanged. In the alternative, AEPG supports the proposal of APS to limit QF contracts to two-year terms.

AEPG argues that long-term, fixed-price contracts based on overstated avoided cost rates places an undue burden on ratepayers. According to AEPG, forecasts of avoided costs have generally overstated a utility's actual avoided costs, and the expectation that avoided cost projections would, on average, reflect the cost avoided by utilities accepting energy from QFs has been shown to be incorrect.

AEPG notes that PURPA does not mandate a 15-year contract term. Although PURPA requires that QFs be provided a reasonable opportunity to attract capital,³⁹ AEPG contends that PURPA does not guarantee that QFs can enter into any specific financing agreement or pursue any specific business model.⁴⁰ According to AEPG, there are multiple avenues available to QF developers to finance renewable energy projects, including utilizing tax equity, debt, and cash equity.⁴¹

AEPG contends that the market has generally seen the terms of purchase power agreements with QFs decline from 20 to 30 years to 10 to 15 years over the past decade.⁴² According to AEPG, the proposed 15-year contract term would unreasonably fix the prices that QFs charge to utilities (and ultimately ratepayers) above the utility's actual avoided costs.

AEPG notes that a number of states have imposed their own contract term limitations on QF agreements. According to AEPG, Idaho has limited QF contracts to two-year terms; Alabama and Tennessee have approved one-year contract terms; and Utah has approved a 15-year default term for QF contracts, with the parties free to negotiate shorter terms.⁴³

AEPG argues that a two-year contract term is in the public interest because it would: 1) protect ratepayers from overpaying for energy from QFs; 2) ensure utility access to negatively priced energy; 3) allow a utility to proactively plan and meet system needs and reliability; and 4) be in the best interest of Arizona and its ratepayers.

In response to 1.21 GW's argument that APS is acting unlawfully by refusing to enter into a long-term QF contract with 1.21 GW, AEPG asserts that neither the Commission's PURPA Policy nor

³⁹ *Windham Solar LLC & Allco Fin. Ltd.*, 157 FERC ¶61,134 (2016) at ¶8.

⁴⁰ Tr. Vol. II at 555:10-556:2; Tr. Vol. II at 422:15-423:15.

⁴¹ Tr. Vol. II at 421:12-422:14; Tr. Vol. II at 445:17-446:10.

⁴² Tr. Vol. I at 255:4-256:1.

⁴³ Exh. GCSECA-1a at 28; Tr. Vol. III at 704:15; Tr. Vol. III at 714:2-14.

1 PURPA itself prescribe a minimum or maximum term for a contract between a utility and a QF. Rather,
2 AEPG contends that the Commission's PURPA Policy provides a flexible guideline to leave the
3 negotiation of specific contract terms, including contract length, to the parties. As a result, AEPG
4 maintains that APS is not acting in violation of any state or federal policy.

5 In response to arguments that long-term, fixed-price QF contracts are beneficial to Arizona,
6 AEPG asserts that long-term QF contracts may adversely impact Arizona utilities and their ratepayers
7 to the sole benefit of QF investors. According to AEPG, Arizona utilities have reached (or will soon
8 reach) a saturation point with respect to non-curtailable renewable resources. APEG contends that
9 without careful management of resource procurement through the Commission's Integrated Resource
10 Planning ("IRP") process, additional QF resources will negatively impact a utility's ability to manage
11 and balance its system. Further, AEPG contends that additional QF resources will impact the ability
12 of the utility to access and utilize negatively priced energy in the EIM.

13 In response to arguments that utilities can negotiate a curtailment provision in a QF contract,
14 AEPG asserts that such a provision would not provide the flexibility required by utilities. According
15 to AEPG, QFs can leverage PURPA's "must-take" obligation to force utilities to pay for the energy
16 that is not taken, even if the utilities negotiate a curtailment provision that requires QFs to scale back
17 energy production.⁴⁴ AEPG asserts that utility-owned resources (or resources contracted through an
18 RFP process) can be curtailed without the corresponding penalty, thereby enabling utilities to take
19 advantage of negatively priced (or lower priced) energy.

20 GCSECA

21 GCSECA is a nonprofit organization that advocates on behalf of its Arizona electric cooperative
22 members (the "Cooperatives").⁴⁵ GCSECA requests that any new policy adopted in this proceeding
23 not apply to the Cooperatives. Further, GSCECA requests confirmation that the Commission's existing
24

25 ⁴⁴ Tr. Vol. II at 393:21-394:24 ("effectively, from the developer's perspective and the investor's prospective, it is really not
26 curtailment per se, because they are being compensated for energy that would have been delivered").

27 ⁴⁵ GCSECA's cooperative members include Arizona Electric Power Cooperative, Inc.; Duncan Valley Electric Cooperative,
28 Inc.; Graham County Electric Cooperative, Inc.; Navopache Electric Cooperative, Inc.; Mohave Electric Cooperative, Inc.;
Sulphur Springs Valley Electric Cooperative, Inc.; and Trico Electric Cooperative, Inc. GCSECA's membership also
includes a few out-of-state electric distribution cooperatives with relatively small Arizona service territories. Exh.
GCSECA-1a at 3-4.

1 PURPA Policy continue to apply to the Cooperatives, and that any new QF contract proposal be
2 addressed on a case-by-case basis according to each individual Cooperative's unique circumstances.

3 GCSECA contends that long-term, fixed-cost QF contracts present problems and risk for all
4 utilities for several reasons. First, GCSECA asserts that accurately forecasting avoided costs is
5 inherently difficult even under the best models. GCSECA witness Mr. Strunk testified that forecasting
6 avoided costs relies on incorporating "extremely uncertain [assumptions]...into a model that's going
7 to [make] accurately predict[ing] avoided cost...next to impossible."⁴⁶ According to Mr. Strunk, the
8 uncertain issues impacting the forecasting of avoided costs include "the penetration of rooftop solar
9 into the future...[, the adoption of electric vehicles, and how those vehicles are used...[, natural gas
10 prices...[, and] REC policies...in Arizona and in neighboring states."⁴⁷ Testifying further, Mr. Strunk
11 stated that the "history has shown [that]...factors that are going to change...were completely
12 unpredictable at the time the forecast was made."⁴⁸ GCSECA argues that recent forecasted avoided
13 costs in Arizona have greatly exceeded actual avoided costs.⁴⁹ As a result, GCSECA notes that QF
14 contracts based on these forecasted avoided costs would have resulted in utilities (and their ratepayers)
15 paying above-market prices for extended durations.

16 According to GCSECA, another problem with requiring utilities to enter into long-term QF
17 contracts is the mismatch between the QF resource and the utility's resource needs. GCSECA notes
18 that under normal circumstances, utilities make their long-term procurement decisions during the IRP
19 process, which allows utilities to consider, among other things, how a given resource will fit within
20 that utility's current resource portfolio. GCSECA contends that QF contracts, on the other hand, are
21 "thrust upon the utility regardless of need or fit."⁵⁰

22 GCSECA argues that the future of PURPA is uncertain. In light of the recently published FERC
23 NOPR, GCSECA contends that the Commission should avoid locking utilities (and their ratepayers)
24 into contracts with duration or term requirements that may become inconsistent with a future,
25 modernized version of PURPA.

26 ⁴⁶ Tr. Vol. I at 202:25-204:7.

27 ⁴⁷ Tr. Vol. I at 202:25-204:7.

28 ⁴⁸ Tr. Vol. I at 210:9-21.

⁴⁹ Exh. APS-1 at 6-8; Tr. Vol. I at 208:9-209:10.

⁵⁰ GCSECA Closing Brief at 4:7-8.

1 GCSECA asserts that the foregoing problems with long-term QF contracts have a greater
2 detrimental impact on the Cooperatives given their smaller sizes, resources, and structure, as well as
3 the economically-challenged rural communities they serve. GCSECA notes that the “Cooperatives
4 operate with smaller margins in order to keep costs low for their member-ratepayers, which leaves less
5 cushion to absorb above-market QF contracts.”⁵¹ According to GCSECA, QF contracts have the
6 potential to detrimentally impact credit profiles of the Cooperatives, the financial consequences of
7 which are passed along to its member-ratepayers.

8 In response to Sierra Club’s proposal, GCSECA acknowledges that Sierra Club witness Mr.
9 Townsend presented limited testimony at the hearing discussing how the Cooperatives could exclude
10 themselves from Sierra Club’s proposal.⁵² However, GCSECA notes that Sierra Club did not present
11 any argument supporting why Sierra Club’s proposal should apply to the Cooperatives in the first place.
12 GCSECA therefore contends that Sierra Club’s proposal should not apply to the Cooperatives.

13 GCSECA notes that no party to this proceeding provided closing argument opposing its
14 proposal that the Commission’s existing PURPA Policy should continue to apply to the Cooperatives.
15 Rather, GCSECA notes that Staff affirmatively supported the proposal of GCSECA.⁵³ As a result,
16 GCSECA requests that its proposal be adopted.

17 Sierra Club

18 Sierra Club argues that QF contracts for utility-scale renewable energy development provide
19 multiple benefits for ratepayers. According to Sierra Club, these benefits include: 1) promotion of
20 renewable energy; 2) opportunities to hedge against market fluctuations by locking in current low
21 avoided cost rates for a fixed term; 3) promotion of healthy competition between QFs and utility
22 monopolies, lowering prices for ratepayers; and 4) shielding ratepayers from risk and costs associated
23 with maintenance, facility upgrades, and early retirement of major infrastructure projects.

24
25
26 ⁵¹ *Id.* at 6:10-12.

27 ⁵² Specifically, Mr. Townsend testified that the Cooperatives could file petitions with FERC seeking exemptions from the
PURPA “must-take” obligation. Exh. SC-4a at 9:11-17. Mr. Townsend further testified that the Cooperatives could also
seek a waiver from the Commission on a project-by-project basis. Tr. Vol. III at 716:22-718:13.

28 ⁵³ Tr. Vol. III at 831:20-832:10; *see also* Tr. Vol. I at 267:6-11 (counsel for 1.21 GW stated that his client had no opposition
to GCSECA’s position).

1 Sierra Club contends that any policy that fails to set a 15-year term minimum for QF contracts
2 will act as a *de facto* ban on utility-scale renewable energy QF contracts. Specifically, Sierra Club
3 maintains that a two or three-year term will not provide enough revenue certainty for investors and will
4 render QF projects unfinanceable.⁵⁴ According to Sierra Club, the most relevant factor for financing
5 is the length of time for which there is price certainty. Sierra Club argues that the unwillingness of
6 utilities to entertain a QF contract length longer than two years is tantamount to an arbitrary roadblock
7 preventing QF contracts from moving forward. Sierra Club contends that for a QF policy to be in
8 compliance with PURPA and consistent with the Commission's PURPA Policy to encourage QF
9 development, the Commission must set a default contract term of 15 years or more. Sierra Club notes
10 that the 15-year term for QF contracts is consistent with other states, including Utah, Wyoming, and
11 Montana.⁵⁵

12 Sierra Club notes that utilities are subject to PURPA's "must-take" obligation, unless exempted
13 by FERC under Section 210(m). Sierra Club further notes that no Arizona utilities have petitioned
14 FERC for an exemption to date. Sierra Club maintains that even if an Arizona utility were to petition
15 for an exemption, that petition would be denied because Arizona is not part of a competitive wholesale
16 market such as an RTO. Although APS participates in the CAISO EIM market (which TEP also intends
17 to join), Sierra Club contends that this market is not equivalent to an RTO.

18 Sierra Club argues that the issues raised by the utilities involving curtailment and REC's can
19 readily be addressed as negotiated provisions in the QF contract. According to Sierra Club, QF projects
20 are already curtailable for reliability reasons under PURPA,⁵⁶ and can be curtailable for economic
21 reasons if negotiated and provided for in the QF contract. As a result, Sierra Club argues that the
22 utilities' suggestions that QF contracts impair the ability of the utility to manage and balance its system
23 or take advantage of negative pricing in the EIM are unfounded. Likewise, Sierra Club contends that
24

25 ⁵⁴ Exh. GW-8a at 3.

26 ⁵⁵ Exh. SC-3a at 14.

27 ⁵⁶ See 18 C.F.R. § 292.307(b) ("[d]uring any system emergency, an electric utility may discontinue...[p]urchases from a
28 [QF] if such purchases would contribute to such emergency"); and 18 C.F.R. § 292.304(f) (utilities are not required to
purchase energy or capacity from a QF "during any period during which, due to operational circumstances, purchases from
[QFs] will result in costs greater than those which the utility would incur if it did not make such purchases, but instead
generated an equivalent amount of energy itself").

1 parties can negotiate terms in QF contracts for the sale and transfer of RECs. Sierra Club notes that
2 the Cliffrose QF contains such a provision transferring RECs for the benefit of UNSE.

3 Sierra Club contends that any concerns regarding the fixed rates in longer-term QF contracts
4 can be addressed by properly calculating the utility's avoided cost. Sierra Club maintains that when
5 the avoided cost is properly calculated, including by incorporating reasonable projections of future
6 demand and prices, unnecessary QF projects will not move forward. According to Sierra Club, a
7 properly calculated avoided cost represents an inherent check on the ability of QF developers to engage
8 in speculative projects or to compel utilities to pay for unneeded energy. Sierra Club submits that the
9 calculation of avoided cost should incorporate the time of day, season of year, the QF's generation
10 profile, customer growth, generating technologies, fuel prices, policies in place in Arizona and
11 neighboring states, the "duck curve" phenomenon, and other factors.⁵⁷ Further, Sierra Club contends
12 that determining the avoided cost rates for a QF contract is no less accurate or reliable than the fixed
13 rates established for long-term solar PPAs developed through the IRP or RFP processes.⁵⁸

14 1.21 GW

15 1.21 GW is attempting to secure QF contracts with TEP and APS to construct 100 MW of solar
16 QFs in TEP's service territory and 320 MW of solar QFs in APS's service territory.⁵⁹ In this
17 proceeding, 1.21 GW requests that the Commission enter an order: 1) requiring APS to immediately
18 move forward with 1.21 GW's proposed projects under a fixed-price contract for a term of 15 years;
19 2) rejecting APS's application; 3) rejecting Staff's recommendation; and 4) implementing a minimum
20 15-year, fixed-price contract for QFs going forward.

21 1.21 GW argues that long-term QF contracts are required under current law and policy. As
22 support, 1.21 GW notes that in 2015, UNSE entered into a 25-year QF contract with LS-Cliffrose, LLC
23 (the "Cliffrose QF").⁶⁰ According to 1.21 GW, the Cliffrose QF is reflective of UNSE and TEP's⁶¹

24
25 ⁵⁷ Tr. Vol. I at 49:2-18; Tr. Vol. I at 113:23-114:18; Tr. Vol. I at 238:18-23.

26 ⁵⁸ Sierra Club notes that APS currently has seven solar PPAs, of which five have 30-year contract terms and two have 25-
year contract terms and TEP currently has 11 solar PPAs, each with a term of 20 years. Exh. GW-8a at 5.

27 ⁵⁹ 1.21 GW initially submitted inquiries to construct twelve 80 MW solar QFs totaling 960 MW in APS's service territory.
Exh. APS-2, Exhibit A. However, 1.21 GW witness Mr. Ellsworth testified that 1.21 GW would initially only construct
four QF facilities totaling 320 MW in APS's service territory. Tr. Vol. III at 769:7-22.

28 ⁶⁰ Exh. GW-13a.

⁶¹ UNSE is the sister company of TEP, and both are among a family of utilities owned by Fortis.

1 understanding that utilities are obligated to provide long-term contracts to QFs. Similarly, 1.21 GW
2 notes that the APS compliance filing reports dated 2004⁶² and 2006⁶³ (collectively, “APS Compliance
3 Filings”) are reflective of APS’s understanding that utilities are obligated to provide long-term
4 contracts because those reports contemplate a pricing methodology for QFs seeking term commitments
5 longer than 5 years. 1.21 GW argues that the Cliffrose QF and APS Compliance Filings provide proof
6 that the utilities understand that current law and policy prohibit them from limiting QF contracts to
7 two-year terms. Further, 1.21 GW asserts that it would be irrational to conclude that APS, TEP, and
8 UNSE filed their applications seeking permission to do what they already could do, namely, limit QF
9 contracts to two-year terms.

10 1.21 GW contends that it would be poor public policy for the Commission to allow utilities to
11 enforce the terms of an application that has not yet been approved. 1.21 GW argues that the public
12 should have a right to rely on the continued fair application of rules and policies by a utility. 1.21 GW
13 submits that it has expended significant time and money in an effort to advance its QF projects in
14 keeping with the Commission’s PURPA Policy and the precedent in the state (e.g. the Cliffrose QF).
15 According to 1.21 GW, public policy implications weigh heavily in favor of permitting 1.21 GW to
16 proceed with its proposed QF projects in Arizona.

17 1.21 GW maintains that the utilities are acting unlawfully by refusing to enter into viable QF
18 contracts with 1.21 GW. According to 1.21 GW, two-year QF contracts are not viable because those
19 projects are not financeable. 1.21 GW asserts that compliance with PURPA requires the utilities to
20 allow for the establishment of QFs, and the Commission’s PURPA Policy states that QFs are to be
21 encouraged. 1.21 GW contends that the utilities are not following the applicable state and federal
22 regulations and are therefore violating their obligations under the law. 1.21 GW submits that in order
23 to remedy this illegal behavior, the Commission must order the utilities to offer 15-year QF contracts
24 for 1.21 GW’s proposed projects.

26 ⁶² Exh. GW-6a at 4 (“The Company believes that for agreements of five years or less, its Avoided Energy Costs will be
27 based on the Market Price otherwise paid for firm energy purchases. For QF’s [sic] seeking longer term agreements, APS
28 will determine its avoided costs based on the individual QF proposal using the Company’s standard evaluative modeling
for long-term resources.”).

⁶³ Exh. GW-5a at 4.

1 1.21 GW contends that it has been harmed due to the delay in executing QF contracts with APS
2 and TEP. According to 1.21 GW, both utilities' avoided costs have fallen since 1.21 GW first requested
3 QF contracts from APS and TEP. 1.21 GW submits that in order to limit future damages, the
4 Commission must order the utilities to immediately move forward with 15-year term QF contracts.

5 1.21 GW argues that a two or three-year term would effectively end new-build QF projects.
6 1.21 GW witness Mr. Jacoby testified that "it is quite clear than a contract term of two or three years
7 is not sufficient to support new build development...[as] these are very capital intensive investments,
8 and investors...need price certainty for a certain period of time...in order to recoup their investment
9 and earn a return."⁶⁴ Testifying further, Mr. Jacoby stated that the "required period of revenue
10 certainty, which typically comes in the form of a long-term [QF contract], has historically been for at
11 least 50 percent of the 30 to 35-year useful life of a solar facility. With a 15-year [QF contract],
12 investors are thus balancing 15 years of price certainty and at least 15-years of market price risk in their
13 financial analysis."⁶⁵

14 1.21 GW contends that a 15-year term is a fair and reasonable compromise. 1.21 GW submits
15 that numerous solar PPAs acquired by utilities via RFPs are for 20 to 30-year terms.⁶⁶ As Mr. Jacoby
16 testified, "while there has been a general trend in the utility scale solar market toward shorter term
17 PPAs, the shortest term PPAs we have recently seen financed in regulated markets have been 15
18 years."⁶⁷ 1.21 GW argues that its proposed 15-year term is a reasonable compromise that will provide
19 a QF developer an opportunity to achieve financing.

20 1.21 GW argues that the proposed two and three-year terms violate federal law because FERC
21 requires QF contracts terms to be "long enough to allow QFs reasonable opportunities to attract capital
22 from potential investors."⁶⁸ According to 1.21 GW, 15 years is the minimum reasonable timeframe
23 needed to meet federal requirements.

24 1.21 GW contends that the proposed QF projects will provide numerous benefits to Arizona
25 and its ratepayers. Specifically, 1.21 GW claims the benefits are: 1) the addition of 420 MW of clean

26 ⁶⁴ Tr. Vol. II at 390:10-21.

27 ⁶⁵ Exh. GW-8a at 3.

28 ⁶⁶ Tr. Vol. I at 131:25-132:3; Exh. GW-8a at 5-6.

⁶⁷ Exh. GW-8a at 3.

⁶⁸ *Windham Solar LLC & Allco Fin. Ltd.*, 157 FERC ¶61,134 (2016) at ¶8.

1 solar energy; 2) the projects will be paid for by investor money, not ratepayer money; 3) the investors,
2 not the utility or its ratepayers, take on the risk that the QFs will underperform or incur increased
3 operational costs; 4) QFs increase competition with monopoly utilities; and 5) QFs displace utility
4 investments on which the utility would otherwise earn a return, therefore saving ratepayers money.

5 In response to arguments that QFs will be built independent of a utility's need, 1.21 GW argues
6 that this position ignores the manner in which QFs come on to a utility's system. According to 1.21
7 GW, the concept of avoided cost pricing self-regulates QF development because as each QF facility is
8 brought online, the avoided cost associated with each successive QF project will be reduced. 1.21 GW
9 contends that the avoided cost rate will reflect when there is no longer a need for additional QF energy
10 and capacity because the avoided cost rate will be so low that it will be uneconomical for additional
11 QFs to come on to the system.

12 In response to arguments that long-term avoided cost pricing poses a risks to ratepayers, 1.21
13 GW asserts that these arguments are flawed because they assume that avoided costs will decline
14 indefinitely. 1.21 GW argues that avoided costs are currently at historic lows and are expected to
15 increase in the future. According to 1.21 GW, ratepayers can benefit by locking in today's low avoided
16 cost pricing and avoid exposure to potentially higher rates in the future.⁶⁹

17 In response to Staff's recommendation, 1.21 GW asserts that Staff's proposal to implement a
18 50 MW program to allow QFs between 100 kW and 2 MW to take service under a nine-year term QF
19 contract is both inefficient and ignores the benefits of utility scale solar. In support, 1.21 GW cites the
20 testimony of Mr. Jacoby who stated that "Staff's proposal effectively focuses QF development into a
21 relatively insignificant distributed market of very limited size and excludes utility scale projects."⁷⁰
22 Testifying further, Mr. Jacoby stated that "the larger the project the greater the economic efficiencies....
23 [What] Staff is recommending is, from a financing standpoint, that's an inefficient program."
24 According to 1.21 GW, Staff's recommendation is flawed because it focuses on system sizes that are
25 economically less efficient.

26
27 ⁶⁹ Exh. GW-1a; Tr. Vol. I at 124:17-125:17 (natural gas prices are projected to increase over the next 30 years, which may
28 place upward pressure on the avoided cost rates).

⁷⁰ Exh. GW-9a at 2.

1 WRA

2 WRA argues that the Commission's PURPA Policy has not been effective in encouraging the
3 development of small power production in Arizona. Since PURPA was implemented in 1978, WRA
4 notes that APS has had 21 contracts with QFs, all of which were for contract terms of one year.⁷¹ In
5 terms of current QF contracts among the utilities, WRA notes that APS has no QF contracts;⁷² TEP has
6 no QF contracts;⁷³ and UNSE has one QF contract for a 46 MW solar project, for a contract term of 25
7 years (the Cliffrose QF).⁷⁴ According to WRA, the lack of QFs currently producing energy for Arizona
8 cannot be considered a successful result.

9 WRA argues that the proposals of APS and Staff will not encourage the development of
10 renewable small power production in Arizona. In support, WRA cites the testimony of 1.21 GW
11 witness Mr. Jacoby who testified that "the shortest term solar PPAs we have recently seen financed in
12 regulated markets have been 15 years"⁷⁵ and "a contract term of two or three years is not sufficient to
13 support new build development."⁷⁶ According to WRA, a 15-year, fixed-price contract will provide a
14 reasonable opportunity for QFs to obtain financing for a new-build utility-scale solar facility. WRA
15 claims that without a reasonable period of price certainty for investors, QF projects will not be built.

16 Staff

17 Staff recommends the following contractual terms and conditions for PURPA contracts
18 between QFs and APS:

- 19 • The Utility will provide a standard offer contract for a contract term of nine (9) years, applicable
20 to a QF with a nameplate capacity over 100 kW and under 2 MW.
- 21 • The rate paid to the QF within this capacity range will be established using the Utility's long-
22 term avoided cost. The Utility shall use the long-term avoided cost methodology established
23 by the Commission. The long-term avoided cost shall take into account market conditions
including any impact the contract will have on excess energy in the market.
- 24 • The Utility will offer this standard offer contract for QFs until it reaches aggregate total QF
25 capacity of 50 MW for that Utility. So long as the Utility does not have an aggregate of 50 MW

26 ⁷¹ Exh. APS-4, Exhibit A; Tr. Vol. II at 316:3-9.

27 ⁷² Tr. Vol. II at 301:15-21.

28 ⁷³ Tr. Vol. II at 538:21-22.

⁷⁴ Tr. Vol. II at 525:1-4; Tr. Vol. II at 538:10-20.

⁷⁵ Exh. GW-8a at 3.

⁷⁶ Tr. Vol. II at 390:1-12.

1 of QF capacity, it must offer the 9-year contract unless the parties negotiate a different term and price.

- 2 • Upon the Utility reaching the aggregate 50 MW QF capacity cap for the standard offer contract,
3 the standard offer contract will no longer be available to prospective QFs.
- 4 • Once the standard offer contract is no longer available, prospective QFs will need to negotiate
5 the contract term (a minimum of three years) and the purchase rates with the Utility. The
6 negotiated contracts may include longer term contracts which contain a provision for avoided
7 cost reevaluation every three years.
- 8 • A Utility shall make its application and contracting procedures readily available to QFs.
- 9 • A QF must follow the interconnection procedures outlined by the Utility. The Utility is
10 obligated to make all the necessary interconnections with the QF to accomplish purchase or
11 sales of energy and capacity.

12 Staff further recommends that the avoided cost rate for QFs be updated as part of the Utility's next rate
13 case proceeding.

14 Staff notes that its recommendation is similar to the positions taken by other states in their
15 efforts to modernize PURPA to recognize the evolving market conditions and technology changes over
16 the last 40 years. Testifying on behalf of Staff, Mr. LaMere noted that Idaho has set a maximum
17 contract term of two years in several cases; Oregon and Utah set contract terms for a fixed rate up to
18 15 years; Washington established a 15-year contract term for large QFs, and a standard offer contract
19 for QFs up to 5 MW; and North Carolina reduced the maximum length of standard offer contracts from
20 15 years to 10 years.⁷⁷ Staff contends that its recommendation balances the interest of the ratepayers,
21 the utility, and the QFs. According to Staff, its recommendation is consistent with state and federal
22 law and is in the public interest.

23 Staff maintains that its recommendation is consistent with recent changes made to the
24 Commission's IRP process as well as potential changes to the Commission's Energy Rules.
25 Specifically, Staff notes that the timeline for load-serving entities to file their IRP has recently been
26 extended from two years to three years.⁷⁸ Additionally, on April 25, 2019, Staff filed proposed
27 modifications to the Commission's Energy Rules recommending that a three-year resource planning

28 ⁷⁷ Exh. S-1a at 13.

⁷⁸ See Decision No. 76632 (March 29, 2018).

1 cycle be adopted by the Commission.⁷⁹ Staff notes that once its recommended standard offer QF
2 contract is no longer available, the minimum three-year QF contract term will “sync up” with the IRP
3 process cycles, allowing the utility to plan with better certainty its future capacity needs in line with
4 forecasted demand, production cost models, and potential QF contracts.⁸⁰

5 Staff asserts that longer-term QF contracts shift risk to ratepayers. Mr. LaMere testified that if
6 a long-term QF contract is executed at a time when the utility’s avoided cost is declining, there is a
7 substantial risk that ratepayers will pay more for energy than they otherwise should be paying.⁸¹ Staff
8 notes that under current PURPA rules, once a contract is entered into between a QF and a utility, the
9 Commission is without authority to revisit the avoided cost rate paid, even if changed circumstances
10 result in the contract price being unfavorable to the utility, and ultimately the ratepayers. Given the
11 current trend of decreasing avoided costs, Staff argues that locking utilities into a 15-year contract term,
12 rather than the shorter terms recommended by Staff, will result in the ratepayers paying higher costs
13 than they should be required to pay.

14 Staff argues that avoided cost rates set for shorter terms would better reflect the utility’s actual
15 avoided costs, and thereby ensure just and reasonable rates paid by ratepayers. According to Staff,
16 there are many factors influencing the avoided cost calculation that cannot be predicted with precision,
17 including load growth, customer energy usage, and future technology development. Additionally, Staff
18 contends that as neighboring states meet renewable energy goals, more and more renewable energy
19 and solar energy will flood the system during the middle of the day, which would continue to decrease
20 market costs during that time.⁸² In light of the multitude of variables and uncertainties inherent in
21 forecasting avoided costs, Staff maintains that its recommendation strikes a reasonable balance
22 between the parties’ interests under PURPA and the Commission’s PURPA Policy, and ensures that
23 the rates paid to QFs are just and reasonable, and in the public interest.

24 Although Staff advocates for shorter-term QF contracts, Staff asserts that the two-year contract
25 limitation proposed by APS is not in the public interest because it does not balance the interests of all

26 ⁷⁹ Docket No. RU-00000A-18-0284 (“In the Matter of Possible Modifications to the Arizona Corporation Commission’s
27 Energy Rules”).

28 ⁸⁰ Staff Closing Brief at 13.

⁸¹ Tr. Vol. III at 875:23-876:7.

⁸² Tr. Vol. III at 697:21-698:19.

1 the parties involved. Further, Staff maintains that the contract term proposed by APS is generally not
2 consistent with how other states have implemented PURPA. Staff notes that only Idaho has set a
3 maximum contract term of two years for certain QF contracts.

4 In response to Sierra Club's suggestion that PURPA benefits Arizona by creating competition,
5 Staff notes that PURPA was never intended to promote competition between renewable resources and
6 utility-owned resources. Rather, "PURPA was created as a vehicle to reduce the nation's dependency
7 on foreign oil and to conserve energy, not to foster competition."⁸³

8 In response to Sierra Club's contention that QFs will not be able to obtain financing if the
9 contract term is less than 15 years, Staff notes that no testimony was presented that any party was
10 specifically denied financing under a contract with a shorter term. Further, Staff cites 1.21 GW witness
11 Mr. Jacoby's testimony indicating that a QF contract with a two-year or a ten-year term could be
12 financed depending on price.⁸⁴ As a result, Staff contends that a contract term of 15 years is not
13 necessary for a QF to function under PURPA in Arizona.

14 In response to Sierra Club's position that QF energy supply can be curtailed by the utility, Staff
15 notes that curtailment is only possible if the QF reaches an agreement with the utility to have its power
16 curtailed. According to Staff, the need to curtail QF energy supply is a serious issue and the utilities
17 are limited in their ability to do so, particularly if the QFs are unwilling to agree to curtail their power.

18 In response to WRA's contention that the Commission's PURPA Policy fails to give effect to
19 the intent of PURPA, Staff argues that this contention overlooks the fact that PURPA's objective has
20 been realized in Arizona and throughout the nation. According to Staff, the adoption of new
21 technologies and the propagation of renewable facilities have changed the energy landscape over the
22 last 40 years, thereby fulfilling the goals of PURPA. Further, Staff notes that FERC has acknowledged
23 that the changed energy landscape since the enactment of PURPA has necessitated PURPA reform.

24 In response to 1.21 GW's position that its pending PURPA projects must be allowed to move
25 forward to take advantage of the ITC, Staff notes that 1.21 GW does not currently have any "pending"

27 ⁸³ *Kamine/Besicopr Allegany L.P. v. Rochester Gas & Elec. Corp.*, 908 F. Supp. 1194, 1204 (W.D.N.Y. 1995); *see also*
28 *Greensboro Lumber Co. v. Georgia Power Co.*, 643 F. Supp. 1345, 1373 (N.D. Ga. 1986), *aff'd* 844 F.2d 1538 (11th Cir.
1988) ("Congress did not intend to place [QFs] in competition with public utilities.").

⁸⁴ Tr. Vol. II at 431:18-432:11.

1 projects with a legally enforceable obligation. Further, Staff notes that 1.21 GW will not lose eligibility
 2 to receive the 30 percent tax credit if it takes advantage of the “Physical Work Test of Five Percent
 3 Safe Harbor”⁸⁵ provision of the ITC by commencing construction of the project prior to January 1,
 4 2020, and placing the project in service prior to January 1, 2024. As a result, Staff argues that the
 5 potential ITC stepdown after January 1, 2020, should not drive the timing of a Commission decision
 6 in this matter.

7 Staff contends that its contract term proposal strikes a reasonable balance between the terms
 8 proposed by the parties, that it aligns with PURPA’s intent and the Commission’s PURPA Policy, and
 9 that it should therefore be adopted by this Commission.

10 **VII. Resolution**

11 The Commission recognizes the value and necessity of increased investment in renewable
 12 energy resources in Arizona. The enforcement of PURPA is one such avenue to encourage renewable
 13 energy development. This Commission’s own PURPA policy, enacted in 1981, explicitly requires this
 14 body to “take an active leadership role in the development of waste heat and renewable energy
 15 resources....” By adopting an 18-year minimum contract term, this Commission is upholding to its
 16 own 1981 policy, as well as adhering to the PURPA statute as currently enacted. It also aligns with the
 17 Integrated Resource Planning process, as recommended by Staff, and complies with the PURPA
 18 requirement that each contract be “long enough to allow QFs reasonable opportunities to attract capital
 19 from potential investors.”⁸⁶ This is the standard we apply here.

20 We find no reason to discriminate between QFs between 100 kW and 2 MW and those 2 MW
 21 or larger, so we cannot support the 2 MW cap recommended by Staff.

22 We further find that there is insufficient support for imposition of a 50 MW cap per utility.

23 APS expressed concern regarding QF development impact on their 15-year Integrated Resource
 24 Plan. To track the actual impact, APS should report the following data every three years in tandem
 25

26
 27 ⁸⁵ The “Physical Work Test of Five Percent Safe Harbor” provision is generally considered satisfied when: 1) the taxpayer
 28 pays or incurs five percent or more of the total cost of the energy project; and 2) the taxpayer makes continuous efforts to
 advance towards completion of the energy project. Exh. S-1a at 10; 26 U.S.C. §§ 48(a)(2)(A), 48(a)(6)(A), and 48(a)(6)(B).

⁸⁶ *Windham Solar LLC & Allco Fin. Ltd.*, 157 FERC ¶161,134 (2016) at ¶18.

with, or as part of, the Integrated Resource Plan: number of QF contracts entered into to date, nameplate capacity for each interconnected QF to date; the avoided cost rate for each QF interconnected to date.

The foregoing does not apply to the Cooperatives given their unique status and the potential impact of long-term, fixed-price QF contracts on their member ratepayers as established in the record. Therefore, the Cooperatives shall not be subject to a minimum contract requirement.

* * * * *

Having considered the entire record herein and being fully advised in the premises, the Commission finds, concludes, and orders that:

FINDINGS OF FACT

1. The foregoing Discussion is hereby incorporated herein as findings of fact.
2. On August 5, 2016, APS filed an application requesting approval of revisions to the Company's Partial Requirements Rate Schedule EPR-2.
3. Intervention in this docket was granted to Sierra Club, AEPG, GCSECA, 1.21 GW, and WRA.
4. On December 11, 2018, Staff filed a Memorandum and Proposed Order recommending, *inter alia*, that APS's proposal to limit contract terms for QFs be denied.
5. On December 17, 2018, the Commission considered this matter at its scheduled Open Meeting. At that time, the Commission directed that this docket, along with similar dockets involving TEP⁸⁷ and UNSE⁸⁸ be submitted to the Hearing Division for a combined hearing, but separate resolution.
6. On January 8, 2019, a Procedural Order was issued scheduling a procedural conference to commence on January 17, 2019.
7. On January 15, 2019, Chairman Burns filed a letter in the docket requesting that the parties discuss the feasibility of expediting the hearing in this matter.
8. On January 17, 2019, the procedural conference was held as scheduled, with APS, TEP, UNS, Sierra Club, Clenera, LLC ("Clenera"),⁸⁹ and Staff appearing through counsel. At that time, the

⁸⁷ Docket No. E-01933A-17-0360.

⁸⁸ Docket No. E-04204A-18-0087.

⁸⁹ Clenera did not apply for intervention, and is therefore not a party to this proceeding.

1 procedural schedule and hearing date jointly proposed by Staff, APS, TEP, and UNS were determined
2 reasonable and appropriate under the circumstances. According to Staff, resource constraints would
3 not allow Staff to meaningfully participate in this matter under a more expedited procedural schedule.

4 9. On January 23, 2019, a Procedural Order was issued scheduling a hearing to commence
5 on November 13, 2019, and establishing other procedural deadlines and requirements.

6 10. On February 6, 2019, at a scheduled Staff Open Meeting, the Commission discussed
7 whether affected parties would be adversely impacted if the hearing date and procedural schedule for
8 this matter could not be modified to accommodate a more expedited schedule. The Commission
9 directed the Hearing Division to convene a procedural conference to further discuss the feasibility of
10 expediting the hearing in this matter.

11 11. On February 8, 2019, by Procedural Order, a procedural conference was scheduled to
12 commence on February 25, 2019.

13 12. On February 21, 2019, APS filed an affidavit of publication certifying that the required
14 notice had been published in the *Arizona Republic*, a newspaper of statewide circulation, on February
15 13 and 17, 2019.

16 13. On February 25, 2019, the procedural conference was held as scheduled, with APS,
17 TEP, UNS, AEPG, Sierra Club, Clenera,⁹⁰ and Staff appearing through counsel. At that time, the
18 parties discussed the feasibility of expediting the existing hearing dates scheduled in this matter. Staff
19 reiterated its position that resource constraints would not allow Staff to meaningfully participate in this
20 matter under a more expedited procedural schedule. As a result, the existing hearing dates were
21 affirmed.

22 14. On April 25, 2019, Commissioner Kennedy filed a letter requesting that this matter be
23 placed on the May Staff Open Meeting agenda.

24 15. On May 30, 2019, at a scheduled Staff Open Meeting, the Commission discussed
25 whether the existing procedural schedule for this matter could be modified to accommodate a more
26 expedited timeframe. At that time, Staff indicated that it could meaningfully participate in this matter
27

28 ⁹⁰ Clenera was advised that future participation in this proceeding would be limited to public comment due to its failure to intervene as a party.

1 if the hearing was rescheduled for the end of August 2019. The Commission directed the Hearing
2 Division to convene a procedural conference.

3 16. Later, on May 30, 2019, a Procedural Order was issued scheduling a procedural
4 conference to commence on June 4, 2019.

5 17. On June 4, 2019, the procedural conference was held as scheduled, with APS, TEP,
6 UNSE, AEPG, Sierra Club,⁹¹ GCSECA, and Staff appearing through counsel. Additionally, counsel
7 for Clenera attended and stated that it would intervene in this proceeding if the hearing was rescheduled
8 for August 2019. The parties discussed and agreed upon modifications to the procedural schedule to
9 accommodate an August 2019 hearing.

10 18. On June 5, 2019, a Procedural Order was issued rescheduling the hearing to commence
11 on August 27, 2019, and establishing other procedural deadlines and requirements.

12 19. On July 8, 2019, APS filed the direct testimony of Bradley J. Albert and Leland R.
13 Snook.

14 20. On July 24, 2019, APS filed an affidavit of publication certifying that the required notice
15 had been published in the *Arizona Republic*, a newspaper of statewide circulation, on June 19 and 23,
16 2019, and posted on APS's website beginning on June 14, 2019.

17 21. On July 31, 2019, Staff filed a Request for Extension of Time to File Direct Testimony.

18 22. On August 1, 2019, a Procedural Order was issued scheduling a procedural conference
19 to commence on August 2, 2019, for the purpose of discussing Staff's extension request.

20 23. On August 2, 2019, the procedural conference was held as scheduled, with APS, TEP,
21 UNSE, AEPG, Sierra Club,⁹² GCSECA, 1.21 GW, WRA, and Staff appearing through counsel. At
22 that time, a discussion occurred regarding Staff's requested extension as well as potential modifications
23 to the existing procedural schedule. Staff's requested extension was thereafter granted, and the
24 deadlines for conducting discovery and the filing of rebuttal testimony associated with Staff's direct
25 testimony was extended until August 23, 2019.

26
27
28 ⁹¹ Counsel for Sierra Club appeared telephonically.

⁹² Counsel for Sierra Club appeared telephonically.

1 24. On August 5, 2019, GCSECA filed the direct testimony of Mr. Kurt Strunk; Sierra Club
2 filed the direct testimony of Mr. Neal Townsend; and 1.21 GW filed the direct testimony of Mr. Ben
3 F. Jacoby.

4 25. On August 15, 2019, Staff filed a Request for Extension of Time to File Direct
5 Testimony, requesting a one-day extension of time to file its direct testimony.

6 26. Also on August 15, 2019, in the TEP and UNSE dockets, 1.21 GW filed a Motion to
7 Compel requesting an order compelling TEP and UNSE to respond to certain discovery requests. By
8 Procedural Order dated August 16, 2019, a procedural conference was scheduled for August 20, 2019.

9 27. On August 16, 2019, Staff filed the direct testimony of Mr. Patrick LaMere.

10 28. On August 20, 2019, the procedural conference was held as scheduled, with APS, TEP,
11 UNSE, GCSECA, 1.21 GW, WRA, and Staff appearing through counsel.⁹³ At that time, oral argument
12 was heard on the discovery dispute, and TEP and UNSE were ordered to provide responses to 1.21
13 GW's discovery requests.

14 29. Also on August 20, 2019, APS filed the rebuttal testimony of Mr. Bradley J. Albert and
15 Mr. Leland R. Snook; GCSECA filed the rebuttal testimony of Mr. Kurt Strunk; Sierra Club filed the
16 rebuttal testimony of Mr. Neal Townsend; and 1.21 GW filed the rebuttal testimony of Mr. Ben F.
17 Jacoby.

18 30. On August 21, 2019, a joint prehearing conference was convened with APS, TEP,
19 UNSE, AEPG, Sierra Club,⁹⁴ GCSECA, 1.21 GW, WRA, and Staff appearing through counsel. At
20 that time, the parties discussed dates certain for the taking of witness testimony. Additionally, 1.21
21 GW's request to call a witness (Mr. Jason Ellsworth) for the limited purpose of responding to
22 allegations contained in APS's rebuttal testimony was granted.

23 31. On August 23, 2019, Sierra Club filed the rebuttal testimony (responsive to Staff's direct
24 testimony) of Mr. Neal Townsend and 1.21 GW filed the rebuttal testimony (responsive to Staff's direct
25 testimony) of Mr. Ben F. Jacoby.

26
27
28 ⁹³ Sierra Club and AEPG did not enter appearances.

⁹⁴ Counsel for Sierra Club appeared telephonically.

1 32. On August 26, 2019, a joint public comment session was held at the Commission's
2 offices, with APS, TEP, UNSE, AEPG, GCSECA, 1.21 GW, WRA, and Staff appearing through
3 counsel.⁹⁵ Three members of the public appeared telephonically to provide public comment.

4 33. On August 27, 2019, 1.21 GW filed a Summary of Expected Testimony of Jason
5 Ellsworth.

6 34. On August 27, 28, and 29, 2019, a full public joint evidentiary hearing was held before
7 a duly authorized Administrative Law Judge of the Commission. At that hearing, APS, TEP, UNSE,
8 Sierra Club, AEPG, GCSECA, 1.21 GW, WRA, and Staff appeared through counsel. APS provided
9 the testimony of Mr. Bradley J. Albert and Mr. Leland R. Snook; TEP and UNSE provided the
10 testimony of Mr. Michael E. Sheehan; GCSECA provided the testimony of Mr. Kurt Strunk; Sierra
11 Club provided the testimony of Mr. Neal Townsend; 1.21 GW provided the testimony of Mr. Ben F.
12 Jacoby and Mr. Jason Ellsworth; and Staff provided the testimony of Mr. Patrick LaMere.

13 35. On October 4, 2019, Staff filed a Request for Procedural Conference requesting the
14 scheduling of a procedural conference to discuss, among other things, whether this matter should be
15 suspended in light of the recently published FERC NOPR.

16 36. Later, on October 4, 2019, a Procedural Order was issued scheduling a procedural
17 conference to commence on October 8, 2019.

18 37. On October 8, 2019, the procedural conference was held as scheduled, with APS, TEP,
19 UNSE, AEPG, Sierra Club,⁹⁶ GCSECA, 1.21 GW, WRA, and Staff appearing through counsel. At
20 that time, the parties provided oral argument on the issue of whether this proceeding should be
21 suspended pending the final rulemaking relating to the FERC NOPR. The issue was thereafter taken
22 under advisement.

23 38. On October 9, 2019, the parties filed their respective initial closing briefs.

24 39. On October 16, 2019, the parties filed their respective reply briefs.
25
26
27

28 ⁹⁵ Sierra Club did not enter an appearance.

⁹⁶ Counsel for Sierra Club appeared telephonically.

40. Based on the record in this proceeding, the Commission finds that APS QF Tariffs shall be revised and modified to reflect the following terms and conditions with respect to contracts between APS and QFs with a nameplate capacity over 100 kW:

- APS will provide QFs with a contract term of no less than eighteen (18) years, applicable to a QF with nameplate capacity over 100 kW.
- APS shall offer QFs contracts that have business terms that are reasonably similar to other PPAs that the utility has entered into previously.
- The rate paid to the QF will be established using APS's long-term avoided cost. APS shall use the long-term avoided cost methodology established by the Commission.
- APS shall make its application and contracting procedures readily available to QFs.
- A QF must follow the interconnection procedures outlined by APS. APS is obligated to make all the necessary interconnections with the qualifying facility to accomplish purchase or sales of energy and capacity.

41. It is reasonable to track the actual impact of QF development on APS's Integrated Resource Plan. Thus, we shall require APS to report all relevant QF data, including but not limited to the following, every three years in tandem with, or as part of, the Integrated Resource Plan:

- number of QF contracts entered into to date;
- nameplate capacity for each interconnected QF to date; and
- the avoided cost rate for each QF interconnected to date.

42. Based on the record in this proceeding, the Commission finds that the contractual terms and conditions approved herein are in the public interest, and consistent with the Public Utility Regulatory Policies Act of 1978 and Commission Decision Nos. 52345 (July 27, 1981) and 56271 (December 18, 1988).

43. This Decision applies to APS and is not binding on any other public service corporation in Arizona.

CONCLUSIONS OF LAW

1. Arizona Public Service Company is a public service corporation within the meaning of Article XV of the Arizona Constitution and A.R.S. Title 40, Chapter 2.

2. The Commission has jurisdiction over Arizona Public Service Company and the subject matter of the application.

3. Notice of the application was provided in the manner prescribed by law.

4. The resolution of the issues reached herein is in the public interest, and consistent with the Public Utility Regulatory Policies Act of 1978 and Commission Decision Nos. 52345 (July 27, 1981) and 56271 (December 18, 1988).

ORDER

IT IS THEREFORE ORDERED that Arizona Public Service Company's application to revise its Partial Requirements Rate Schedule EPR-2 is hereby approved, as modified and discussed herein.

IT IS FURTHER ORDERED that Arizona Public Service Company shall file a revised Rate Schedule EPR-2 consistent with this Decision no later than December 31, 2019.

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

• • •

...

IT IS FURTHER ORDERED that APS shall provide all relevant QF data to this Commission every three years, in tandem with or as part of the Integrated Resource Planning report. Data should include but not be limited to:

- number of QF contracts entered into to date;
- nameplate capacity for each interconnected QF to date; and
- the avoided cost rate for each QF interconnected to date.

IT IS FURTHER ORDERED that this Decision shall become effective immediately.

BY ORDER OF THE ARIZONA CORPORATION COMMISSION.

 CHAIRMAN BURNS  COMMISSIONER DUNN  COMMISSIONER KENNEDY

 COMMISSIONER OLSON

 COMMISSIONER MÁRQUEZ PETERSON



IN WITNESS WHEREOF, I, MATTHEW J. NEUBERT, Executive Director of the Arizona Corporation Commission, have hereunto set my hand and caused the official seal of the Commission to be affixed at the Capitol, in the City of Phoenix, this 17 day of December 2019.


MATTHEW J. NEUBERT
EXECUTIVE DIRECTOR

DISSENT _____

DISSENT _____
SMH/gb

SERVICE LIST FOR:

ARIZONA PUBLIC SERVICE COMPANY

DOCKET NO.:

E-01345A-16-0272

Thomas L. Mumaw
Melissa M. Krueger
Theresa Dwyer
PINNACLE WEST CAPITAL
CORPORATION
400 N. 5th Street, MS 8695
Phoenix, AZ 85004
Attorneys for Arizona Public Service Company
Thomas.Mumaw@pinnaclewest.com
Melissa.Krueger@pinnaclewest.com
Theresa.Dwyer@pinnaclewest.com

Consented to Service by Email

Jennifer A. Cranston
GALLAGHER & KENNEDY, P.A.
2575 E. Camelback Road, Suite 1100
Phoenix, AZ 85016
Attorney for Grand Canyon State Electric
Cooperative Association, Inc.
jennifer.cranston@gknet.com
lgernet@azgt.coop
ACCFilings@gcseca.coop
JCanaca@gcseca.coop

Consented to Service by Email

Peter M. Morgan
SIERRA CLUB ENVIRONMENTAL LAW
PROGRAM
1536 Wynkop St., Ste 200
Denver, CO 80202
Attorney for Sierra Club
peter.morgan@sierraclub.org

Consented to Service by Email

Adam L. Stafford
WESTERN RESOURCE ADVOCATES
P.O. Box 30497
Phoenix, AZ 85046
Staff Attorney for Western Resource Advocates
adam.stafford@westernresources.org
steve.michel@westernresources.org
autumn.johnson@westernresources.org

Consented to Service by Email

Timothy M. Hogan
Jennifer B. Anderson
ARIZONA CENTER FOR LAW
IN THE PUBLIC INTEREST
514 W. Roosevelt Street
Phoenix, AZ 85003
Attorneys for Sierra Club
thogan@aclpi.org
louisa.eberle@sierraclub.org
peter.morgan@sierraclub.org
sandy.bahr@sierraclub.org
katie.chamberlain@sierraclub.org
janderson@aclpi.org
sbatten@aclpi.org

Consented to Service by Email

Stanley B. Lutz
LEWIS ROCA ROTHGERBER CHRISTIE,
LLP
201 E. Washington St., Suite 1200
Phoenix, AZ 85004
Attorney for Arizona Energy Policy Group, Inc.
sblutz@lrrc.com
ArizonaEnergyPolicyGroup@gmail.com

Consented to Service by Email

Court S. Rich
Eric A. Hill
ROSE LAW GROUP, P.C.
7144 East Stetson Drive, Suite 300
Scottsdale, AZ 85251
Attorneys for 1.21 GW LLC
crich@roselawgroup.com
hslaughter@roselawgroup.com
ehill@roselawgroup.com

Consented to Service by Email

Robin Mitchell, Director
Legal Division
ARIZONA CORPORATION COMMISSION
1200 West Washington Street
Phoenix, AZ 85007
LegalDiv@azcc.gov
utildivservicebyemail@azcc.gov

Consented to Service By Email